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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,214	06/30/2003	Andre Coutu	134821	7665

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EXAMINER	
SAINT SURIN, JACQUES M	

ART UNIT	PAPER NUMBER
2856	

DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/608,214	COUTU ET AL.	
	Examiner	Art Unit	
	Jacques M Saint-Surin	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 June 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/30/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-6, 8-10, 12-18, 20-22 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Hunt (US Patent 6,556,956).

Regarding claims 1, 4, 13 and 16, Hunt discloses a method for analyzing turbine noise vibrations (remote monitoring system 10 that is capable of continuous diagnostic monitoring of rotating machinery 12 located at geographically dispersed locations, see: col. 2, lines 28-31 and Fig. 1) comprising the steps of:

receiving (data acquisition unit 14, see: Fig. 1 and col. 2, line 38) at an expert site (on-site computer system 20) recorded noise information relating to noise of a hydraulic

turbine (machine 12, see: Fig. 1 and col. 2, line 39) recorded at a remote site either during turbine operation at the remote site or intentionally produced for test purposes at the remote site (remote monitoring system 10 that is capable of continuous diagnostic monitoring of rotating machinery 12 located at geographically dispersed locations, see: col. 2, lines 28-31 and Fig. 1);

and analyzing the recorded noise information at the expert site (the data is processed at the data acquisition units 14 and analyzed at the central monitoring station 16, see: col. 2, lines 42-44).

Regarding claim 4, as discussed above, it is rejected for the reasons set forth for claim 1. Furthermore, Hunt discloses the data acquisition units 14 collect data from the corresponding machines 12 and transfer the data to a central monitoring station 16 via respective communication links 18. The communication links 18 can be any type of transmission link such as, but not limited to, telephone lines or the Internet (see: col. 2, lines 38-46).

Regarding claim 13, as discussed above, it is a system claim that recites the same limitations of claim 1. Hunt further teaches an expert site (data acquisition unit 14), communication links 18 and an expert office site (central station 16). Therefore, it is rejected for the reasons set forth for that claim.

Regarding claim 16, as discussed above, it is a system claim that recites the same limitations of claim 1. Hunt further teaches a remote site recorder (data acquisition unit 14. The data acquisition unit 14 includes an on-site computer system 20, one or more process data sensors 22, and one or more dynamic data sensors 24, see: col. 2, lines 49-52).

Regarding claims 2, 5, 14 and 17, Hunt discloses the CPU 26 processes the inputted process data signals to permit diagnosis and prediction of performance related issues for the machine 12 (a process commonly known as trending), see: col. 3, lines 17-33.

Regarding claims 3, 9, 15 and 21, Hunt discloses a separate data acquisition unit 14 is associated with each rotating machine 12. The data acquisition units 14 collect data from the corresponding machines 12 and transfer the data to a central monitoring station 16 via respective communication links 18. In one embodiment, the data is processed at the data acquisition units 14 and analyzed at the central monitoring station 16. The communication links 18 can be any type of transmission link such as, but not limited to, telephone lines or the Internet, see: col. 2, lines 38-46).

Regarding claims 6, 10, 18 and 22, Hunt discloses the data acquisition unit 14 includes an on-site computer system 20, one or more process data sensors 22, and one or more dynamic data sensors 24. The process data sensors 22 communicate with the machine12 to be monitored to sense process data that are indicative of the overall performance and/or condition of the machine 12. For example, the dynamic data sensors 24 may be proximity probes, accelerometers or any means for sensing vibrations, see: col. 2, lines 50-67 and col. 3, lines 1-4. Fig. 2 shows dynamic data sensors 24 attached to auxiliary processor 28.

Regarding claims 8, 12, 20 and 24, Hunt discloses the process data sensors 22 generate process data signals that are fed to the CPU 26 via an interface 32, which may be a standard RS/Ethernet interface. The process data signals are also fed to the auxiliary processor 28 via another interface 34, which may be an analog coaxial cable.

The dynamic data sensors 24 generate dynamic data signals that are fed to the auxiliary processor 28 via an interface 36, which may also be an analog coaxial cable. The trend parameter signals are also transmitted to the central monitoring station 16 via the communication link 18. The trend parameter signals are viewed at the central monitoring station 16 and compared to a parametric baseline for the machine 12 to detect symptoms indicative of a need for inspection or maintenance, see: col. 3, lines 5-28. The method of compressing and uncompressing the computer file of the recorded noise are inherently met in Hunt since the communication link 18 can be any type of transmission link such as, but not limited to telephone lines or the internet. It is clear that the claimed invention is using internet for forwarding the information via email. Therefore, when the communication link is being used as internet the techniques of compressing and uncompressing the computer files would be applied as standard for sending and receiving information from the expert site 14 to the remote site 16.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 7, 11, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt (US Patent 6,556,956) in view of Jones (US Patent Application Publication 2002/0154327).

Regarding claims 7, 11, 19 and 23,Hunt discloses data sensors would be of the type that convert mechanical motion or energy into electrical signals, for example, data sensors may be proximity probes, accelerometers or any means for sensing vibrations (see: col. 3, lines 1-7 Note that Hunt discloses a computer system 20 which can be any type of computer system such as PC, includes a primary or central processing unit (CPU) 26. However, Hunt does not specifically disclose or suggest a window sound recorder or a sound recorder program utilized to capture the noise information. Jones discloses a sound processor 119 is realized as an application program such as Microsoft Windows Sound Recorder, see: page 2, poaragraph 0021, lines 4-6. It would have been obvious to one having ordinary skill in the art at the time of the invention to utilize in Hunt the sound processor 119 of Jones because it would be realized as an application program Microsoft Windows sound recorder thereby providing the advantages of having the stored information in a desired format for further processing and forwarding in an effective and reliable manner.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eryurek et al. (US Patent 6,795,798) discloses a remote analysis of process control plant data.

Leamy et al. (US Patent 6,711,952) discloses a method and system for monitoring bearings.

Wobben (US Patent 6,785,637) discloses a method for monitoring wind power plants.

Follin et al. (US Patent 6,760,689) discloses a system and method for processing data obtained from turbine operations.

Hala (US Patent 6,026,348) discloses an apparatus and method for compressing measurement correlative data machine status.

Harrison (US Patent 6,301,572) discloses a neural network based analysis system for vibration analysis and condition monitoring.

Dowling et al. (US Patent 6,308,140) discloses a motor condition and performance analyzer.

Quist et al. (US Patent 6,199,018) discloses a distributed diagnostic system.

Tanaka (US Patent 6,766,224) discloses an integrated operation instructing system for operating power generating plants.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques M Saint-Surin whose telephone number is (571) 272-2206. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703) 305-4705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jacques M. Saint-Surin
December 06, 2004

HEZRON WILLIAMS
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